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March 29, 2013

Director of Engineering  
Kentucky Public Service Commission  
P.O. Box 615  
Frankfort, Kentucky 40602-0615

RE: Administrative Case No. 2006-00494

Enclosed are the original and five (5) copies of the 2012 Distribution Reliability Report, for Owen Electric Cooperative, as requested in the aforementioned order.

Should you have any questions or need further information, please contact our office

Sincerely,



Rusty Williams  
Vice President of Operations

Enclosures

# KENTUCKY PUBLIC SERVICE COMMISSION

## Electric Distribution Utility Annual Reliability Report

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### SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	Owen Electric Cooperative
REPORT PREPARED BY	1.2	James Petreshock
E-MAIL ADDRESS OF PREPARER	1.3	<a href="mailto:jpeshock@owenelectric.com">jpeshock@owenelectric.com</a>
PHONE NUMBER OF PREPARER	1.4	(502)563-3492

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### SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	2012
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### SECTION 3: MAJOR EVENT DAYS

$T_{MED}$	3.1	12.685
FIRST DATE USED TO DETERMINE $T_{MED}$	3.2	01/01/07
LAST DATE USED TO DETERMINE $T_{MED}$	3.3	12/31/11
NUMBER OF MED IN REPORT YEAR	3.4	5

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NOTE: Per IEEE 1366  $T_{MED}$  should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

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### SECTION 4: SYSTEM RELIABILITY RESULTS

#### Excluding MED

SAIDI	4.1	125.357
SAIFI	4.2	1.332
CAIDI	4.3	94.145

#### Including MED (Optional)

SAIDI	4.4	351
SAIFI	4.5	1.985
CAIDI	4.6	176.796

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#### Notes:

- 1) All duration indices (SAIDI, CAIDI) are to be reported in units of minutes.
  - 2) Reports are due on the first business day of April of each year
  - 3) Reports cover the calendar year ending in the December before the reports are due.
  - 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, CAIDI, and  $T_{MED}$
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### SECTION 5: OUTAGE CAUSE CATEGORIES

Excluding MED

CAUSE CODE DESCRIPTION		SAIDI VALUE	CAUSE CODE DESCRIPTION		SAIFI VALUE
Major Storm	5.1.1	26.808	Power Supplier	5.2.1	0.426
Weather	5.1.2	25.585	Weather	5.2.2	0.372
Scheduled	5.1.3	16.103	Major Storm	5.2.3	0.101
Unknown	5.1.4	12.979	Unknown	5.2.4	0.098
Power Supplier	5.1.5	9.381	Member/Public	5.2.5	0.073
Member/Public	5.1.6	8.537	Age/Deterioration	5.2.6	0.071
Equipment/Installation	5.1.7	7.260	Scheduled	5.2.7	0.051
Birds/Animals	5.1.8	7.133	Birds/Animals	5.2.8	0.044
Age/Deterioration	5.1.9	6.668	Equipment/Installation	5.2.9	0.040
R.O.W. Unpreventable	5.1.10	2.742	R.O.W. Unpreventable	5.2.10	0.029

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### SECTION 6: WORST PERFORMING CIRCUITS

CIRCUIT IDENTIFIER		SAIDI VALUE	MAJOR OUTAGE CATEGORY
Bullitsville (0802)	6.1.1	867.02	Major Storm
Grantslick II (5105)	6.1.2	857.81	Major Storm
Grantslick (0304)	6.1.3	820.53	Weather
Belleview (2704)	6.1.4	654.59	Major Storm
Burlington (2404)	6.1.5	434.98	Major Storm
Grantslick (0303)	6.1.6	415.65	Major Storm
Keith (1303)	6.1.7	370.38	Weather
Carson (1103)	6.1.8	342.02	Weather
Banklick (0203)	6.1.9	333.86	Weather
Carson (1102)	6.1.10	315.18	Weather

CIRCUIT IDENTIFIER		SAIFI VALUE	MAJOR OUTAGE CATEGORY
Burlington (2403)	6.2.1	8.05	Equipment/Installation
Banklick (0203)	6.2.2	5.74	Weather
Keith (1303)	6.2.3	4.14	Weather
Bavarian (2301)	6.2.4	3.49	Age/Deterioration
Carson (1102)	6.2.5	3.18	Weather
Smoot (5304)	6.2.6	2.99	Unknown
Grantslick (5105)	6.2.7	2.83	Scheduled
Boone (0105)	6.2.8	2.46	Birds/Animals
Bullitsville (0802)	6.2.9	2.39	Weather
Munk (0402)	6.2.10	2.30	Weather

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Additional pages may be attached as necessary

### SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

Owen Electric's Vegetation Management Plan, depending on budget, is an aggressive 4-yr. trim cycle covering our operating territory. OEC also maintains a 2-yr. intermediate trim cycle for 3-ph lines extending from the substation to the first set of breakers and beyond, as the need and budget allows. Owen employs a comprehensive herbicide spray program covering our entire operating area, again, in a 4-yr. cycle. Circuit spraying is done the year following the circuit trim to allow the tender re-sprouts to fully absorb the herbicide.

Our vegetation management plan is fluid and can be adjusted easily to allow for rainfall, drought, and differences in soil fertility and soil structure. If a circuit needs to be attended sooner than scheduled, or later, it can be done.

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## SECTION 8: UTILITY COMMENTS

During the course of 2012 Owen Electric Cooperative experienced five Major Event Days with a major severe weather outbreak event on March 02, 2012 which produced three confirmed tornadoes which devastated parts of our service territory. As a result of the extensive damage to both our infrastructure and our members facilities some members were without power for over 5 days. Additionally, the intense heat wave that we experienced this summer repeatedly fueled severe thunderstorms that affected our service territory during the months of June and July. These events contributed noticeably to the overall reliability indices at the system and feeder levels. OEC continues to support several initiatives designed to minimize the extent of outages and speed in the restoration of outages caused by weather. Owen Electric's Feeder Hardening program is in its fifth year. OEC has also implemented an ongoing over-current protection review of each feeder prioritized by operational feedback and length of feeder. The 10-WPC's are the driver for these programs.

We continue to operate a State-funded (DEDI) "smart-grid" self-healing project which was deployed in April of 2011 and have expanded this technology to two additional sites through a Federally funded DOE grant, to provide backup power to critical Sanitation District plants. While there were no "healing" events that occurred in 2012 we have recently utilized the system deployed in OEC's Scott County service area, to restore power to members by manually operating switches and back feeding isolated and non-faulted sections of line. This SCADA controlled distribution level switching resulted in a 33% reduction in total member minutes without power.

Lastly OEC has several very long, 25kV feeders that by nature routinely appear on the 10 WPC's. OEC continues working on future plans to address these feeders with new substations that will shorten the feeder lengths and provide improvements in reliability. Until these substations can be implemented, initiatives such as feeder hardening, focused ROW clearing, and increased sectionalizing will continue to be considered.